

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
28 April 2005 (28.04.2005)

PCT

(10) International Publication Number  
**WO 2005/037887 A1**

(51) International Patent Classification<sup>7</sup>: **C08G 18/61**,  
77/16, 77/14

(21) International Application Number:  
PCT/US2004/033190

(22) International Filing Date: 8 October 2004 (08.10.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
60/510,235 10 October 2003 (10.10.2003) US

(71) Applicant (for all designated States except US): **DOW CORNING CORPORATION** [US/US]; 2200 West Salzburg Road, Midland, MI 48686-0994 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **CHENG, Tammy** [US/US]; 1323 Colorado Court, Midland, MI 48642 (US). **FERRITTO, Michael** [US/US]; 3004 Jeffrey Lane, Midland, MI 48640 (US). **GORDON, Glenn** [US/US]; 3714 Collingwood Street, Midland, MI 48642 (US). **HORSTMAN, John, Bernard** [US/US]; 2806 West River Road, Midland, MI 48642 (US). **SCHMIDT, Randall** [US/US]; 813 Honeysuckle Circle, Midland, MI 48642 (US). **WIEBER, Gary** [US/US]; 4407 Huron Drive, Midland, MI 48642 (US). **WITUCKI, Gerald, Lawrence** [US/US]; 1315 Whitehall, Midland, MI 48642 (US).

(74) Common Representative: **SCADUTO, Patricia, M.**; IP Department - Mail CO1232, Dow Corning Corporation, 2200 West Salzburg Road, Midland, MI 48686-0994 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,

MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Declarations under Rule 4.17:**

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for all designations
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)
- of inventorship (Rule 4.17(iv)) for US only

**Published:**

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: URETHANE COMPOSITIONS CONTAINING CARBINOL-FUNCTIONAL SILICONE RESINS

(57) Abstract: This invention relates to urethane compositions comprising: (A) 100 weight parts of at least one compound containing at least one isocyanate group; (B) 0.3-300 weight parts of a carbinol-functional silicone resin; (C) up to 250 weight parts of an organic polyol; and (D) up to 10 weight parts of a cure rate modifier. The urethane compositions of this invention are useful as a stand-alone coating or as ingredients in protective coatings, paint formulations, and powder coatings. The urethane compositions of this invention can also be formulated with a blowing agent and cell stabilizer to produce thermally stable foam formulations.

WO 2005/037887 A1